The FOOTING TUBE

TECHNICAL SPECIFICATIONS

Height inches	6" Deck Tube	8" Footing Tube	10/12" Footing Tube
64"	Maximum 8' load bearing for the deck tube		10"
62"		8"	12"
60"		8.24"	12.28"
58"		8.48"	12.56"
56"		8.72"	12.84"
54"	6"	8.96"	13.12"
52"	6.24"	9.2"	13.40"
50"	6.48"	9.44"	13.68"
48"	6.72"	9.68"	13.96"
46"	6.96"	9.92"	14.24"
44"	7.20"	10.16"	14.52"
42"	7.44"	10.4"	14.80"
40"	7.68"	10.64"	15.08"
38"	7.92"	10.88"	15.36"
36"	8.16"	11.12"	15.64"
Base outside	14"	24"	24"
Base inside	12.50"	21.75"	21.75"
Volume	2.3 ft^3 .065 m^3	4.8 ft^3 .136 m^3	8.5 ft^3 .24 m^3

Based on the National Building Code of Canada (1995) "Part 9.4.4.1. Allowable Bearing Pressures", the following table calculates the load bearing capability of the differing soils that the pier may be placed on.

(Using concrete base area for respective tubes on inner flange for the calculation.)

Soil Description	Allowable Bearing pressure kPa=psi	6" Deck Tube 123in^2 base	8" & 10/12" Footing Tube 371in^2 base
Dense or compact sand or gravel	150=21.75	2675 lb/tube	8069 lb/tube
Loose sand or gravel	50=7.25	891 lb/tube	2690 lb/tube
Dense or compact silt	100=14.5	1783 lb/tube	5380 lb/tube
Stiff clay	150=21.75	2675 lb/tube	8069 lb/tube
Firm clay	75=10.88	1338 lb/tube	4036 lb/tube
Soft clay	40=5.8	713 lb/tube	2152 lb/tube
Till	200=29	3567 lb/tube	10761 lb/tube
Clay shale	300=43.5	5350 lb/tube	16139 lb/tube
Sound bedrock	500=72.5	8917 lb/tube	26898 lb/tube

Please be advised that the load-bearing table is based on the Allowable Soil Bearing Pressure.

The concrete to be placed in the tubes is to have a minimum compressive strength of 3000 psi (20.7MPa) at 28 days and to be poured per the National Building Code of Canada (1995) standards.

Please verify all load bearing requirements with the local building officials or a qualified engineer.

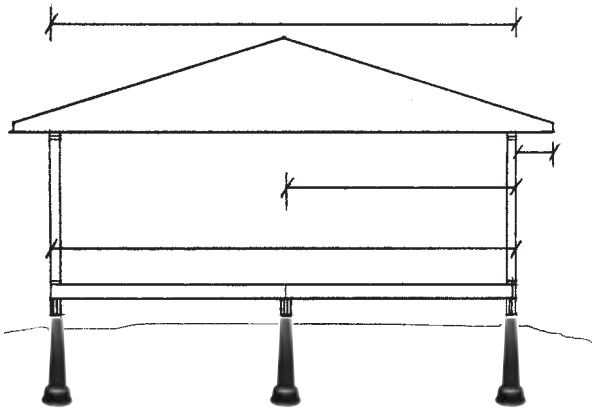
Prepared: November, 2001
Modified: January, 2004

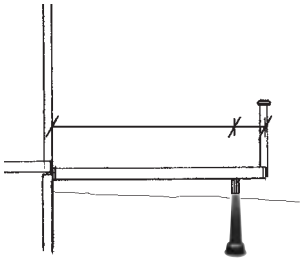
28 Amberwood Lane, Fredericton, NB E3C 1L7 Toll Free: 1-888-929-2011 Tel: 506-452-8919 Fax: 506-457-2543 concrete@foottube.com www.foottube.com

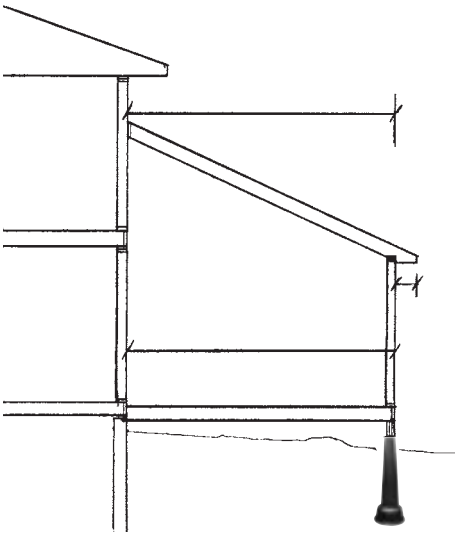
The FOOTING TUBE

Formula to Calculate Loads of Buildings

Cottage or House	Deck/Balcony	Addition







Deck Formula: *(Max 8' load bearing capacity with deck tube)*

_____ ÷ 2 + _____ x (_____ + _____) = _____ x _____ = _____

deck joist length to centre of beam in lin.ft. | *over hang* | *design live load for balconies unfactored + dead load in lbs.* | *lbs/lin. ft.* | *length of deck* | *weight in lbs-deck beam to support*

Floor Formula:

_____ ÷ 2 x (_____ + _____) = _____ x _____ = _____

floor joist length in lin.ft. | *live load in lbs. + dead load in lbs.* | *lbs/lin. ft.* | *length of floor* | *weight in lbs-floor load/side*

Roof Formula:

_____ ÷ 2 + _____ x (_____ + _____) = _____ x _____ = _____

truss length in lin. ft. | *over hang* | *design live load for roof trusses unfactored + dead load in lbs.* | *lbs/lin. ft.* | *length of roof* | *weight in lbs-roof load/side*

Exterior wall weight at 100lbs/lin.ft. X _____ = _____

lin.ft. supported | *weight in lbs-wall load/side*

Total load to be supported by piers = _____ **lbs ÷** _____ **=** _____

Soil type bearing Pressure / tube | **# of tubes required**

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